What is claimed is:

1. A measurement device which includes a plurality of inclinometer systems for determining steady-state, three-dimensional positions relative to a predefined inertial direction and for determining the three-dimensional orientation of a body relative to two reference directions lying in a horizontal plane comprising:

a housing adapted for placement on a surface or edge of the body to be measured;

a least three individual inclinometers on or within the housing each positioned in respective reference directions so as to be oriented in different directions in space relative to each other in order to register a component of acceleration due to gravity; and

a computation device,

wherein a combination of three individual inclinometers combine to form one inclinometer triad supplying a respective first measured result which indicates the three-dimensional angular orientation of the measurement device with the directional coordinates of roll and pitch such that a plurality of measured results of a first type can be determined, and

wherein the computation device is adapted for determining a measured result of a second type from the measured results of the first type, the measured result of a second type being an overall measured result which indicates another angular orientation of the measurement device with regard to the directional coordinates of roll and pitch.

2. The measurement device as claimed in claim 1, wherein at least four inclinometers are provided on or within the housing.

3. The measurement device as claimed in claim 1, wherein the computation device has means for performing an averaging method on the plurality of measured results of the first type to achieve the measured result of the second type.

4. The measurement device as claimed in claim 1, wherein the different reference directions relate to a point of symmetry and substantially correspond to the directions perpendicular to surfaces of a regular polyhedron.

5. The measurement device as claimed in claim 4, wherein the regular polyhedron is one of a tetrahedron, an octahedron and a dodecahedron.

6. The measurement device as claimed in claim 1, wherein the different reference directions relate to a line in space and substantially correspond to directions which are defined by perpendiculars of side faces of an at least four-sided pyramid.

7. The measurement device as claimed in claim 1, wherein the different reference directions relate to a line in space and substantially correspond to directions which are defined by perpendiculars of side faces of an at least three-sided pyramid.

8. The measurement device as claimed in claim 4, wherein there are eight individual inclinometers each of which has definitive reference directions that are aligned parallel to one of surface perpendiculars, edges of the polyhedron, corner radii of the polyhedron or edge center radii of the polyhedron.

9. The measurement device as claimed in claim 1, including a gyroscope-based directional measurement device for providing confirmation of the measured results of the first and second type with respect to a roll coordinate and a pitch coordinate.

10. The measurement device as claimed in claim 9, in which, when the measurement device is in a mechanical rest state, the current gyroscope-based directional measured result is equivalent to the azimuthal (yaw) rotational movement as a best value in the shortest possible time employing the inclinometer-based roll and pitch directional measured results, wherein the best value is calculated by a predefined or adaptable algorithm.

11. The measurement device as claimed in claim 1, in which the overall measured result is determined by a weighted average and by using a weighting criteria.

12. A method of providing an accurate position value when determining the three-dimensional orientation of a measurement device or of a body in contact with the measurement device comprising:

a first measurement step of obtaining all usable directional information by means of measurement values acquired from combinations of three inclinometers from a total of "k" individual inclinometers present on or in the measurement device; and

a second measurement step of computing an overall measured result by means of statistical algorithm from the usable directional information of the first measurement step,

wherein "k" is at least three individual inclinometers positioned in respective reference directions so as to be oriented in different directions in space relative to each other in order to register a component of acceleration due to gravity.

13. A machine for the production or processing of paper, metal or plastic films comprising the measurement device of claim 1.

14. A machine tool comprising the measurement device of claim 1.

15. A method of prospecting for or supplying oil wherein directional information for the apparatus for prospecting or supplying oil is determined by the method of claim 12.

16. A method for measuring buildings or structure wherein directional information for the building or structure is determined by the method of claim 12.